

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A molding with synthetic polymer surfaces which have self-cleaning properties and have surface structures with elevations, characterized in that the elevations are formed by particles which have been securely bonded to the synthetic polymer surface and which have hydrophobic properties, the particles having been bonded directly into the synthetic polymer surface, rather than having been bonded by way of carrier systems or the like.

Claim 2 (Original): The molding as claimed in claim 1, characterized in that the elevations have an average height of from 50 nm to 25 μm and an average separation of from 50 nm to 25 μm .

Claim 3 (Currently Amended): The molding as claimed in claim 1 ~~or 2~~, characterized in that the elevations have an average height of from 50 nm to 4 μm and/or an average separation of from 50 nm to 4 μm .

Claim 4 (Currently Amended): The molding as claimed in ~~any of claims 1 to 3~~ claim
1, characterized in that the elevations have an aspect ratio of from 0.5 to 20.

Claim 5 (Currently Amended): The molding as claimed in claim 4,
characterized in that
the elevations have an aspect ratio of from 1 to 10.

Claim 6 (Currently Amended): The molding as claimed in ~~any of claims 1 to 5~~ claim
1,
characterized in that
the elevations have been applied to the inner surface of the moldings.

Claim 7 (Currently Amended): The molding as claimed in ~~any of claims 1 to 6~~ claim
1,
characterized in that
the elevations have been applied to the outer surface of the moldings.

Claim 8 (Currently Amended): The molding as claimed in ~~any of claims 1 to 7~~ claim
1,
characterized in that
the synthetic polymer surface of the moldings comprises a material selected from
poly(trifluoroethylene), poly(vinylidene fluoride), poly(chlorotrifluoroethylene),
poly(hexafluoropropylene), poly(perfluoropropylene oxide), poly(fluoroalkyl acrylate),
poly(fluoroalkyl methacrylate), poly(vinyl perfluoroalkyl ether), or comprises other polymers
from perfluoroalkoxy compounds, poly(isobutene), poly(4-methyl-1-pentene),
polycarbonates, poly(meth)acrylates, polyamides, PVC, polyethylenes, polypropylenes,
aliphatic linear or branched alkenes, cyclic alkenes, polystyrenes, polyesters, polyether

sulfones, polyacrylonitrile, or polyalkylene terephthalates, and polynorbornene, in the form of
- homo- or copolymer, or comprises a mixture of these.

Claim 9 (Currently Amended): The molding as claimed in ~~any of claims 1 to 8~~ claim
1,

characterized in that

the surface of the particles has an irregular fine structure in the nanometer range.

Claim 10 (Currently Amended): The molding as claimed in ~~at least one of claims 1 to~~
~~9~~ claim 1,

characterized in that

the moldings comprise particles selected from silicates, minerals, metal oxides, metal
powders, silicas, pigments, or polymers.

Claim 11 (Currently Amended): The molding as claimed in ~~at least one of claims 1 to~~
~~10~~ claim 1,

characterized in that

the moldings comprise particles selected from fumed silicas, precipitated silicas,
aluminum oxide, silicon oxide, doped silicates, fumed silicates, or pulverulent polymers.

Claim 12 (Original): A process for producing moldings with surfaces, all or part of
which have elevations,
characterized in that
a surface of the moldings which is swollen by a swelling agent is treated with this
swelling agent, where the swelling agent comprises undissolved particles having hydrophobic

- properties, and after removal of the swelling agent and drying at least some of the particles
- are securely bonded to the surface of the moldings.

Claim 13 (Original): The process as claimed in claim 12,
characterized in that
the particles have been suspended in the swelling agent.

Claim 14 (Currently Amended): The process as claimed in claim 12 ~~or 13~~,
characterized in that
the surface which is solvated by a swelling agent comprises polymers based on
polycarbonates, on poly(meth)acrylates, on polyamides, on PVC, on polyethylenes, on
polypropylenes, on aliphatic linear or branched alkenes, on cyclic alkenes, on polystyrenes,
on polyesters, on polyether sulfones, on polyacrylonitrile, or on polyalkylene terephthalates,
or else comprises their mixtures or copolymers.

Claim 15 (Currently Amended): The process as claimed in ~~at least one of claims 12~~
~~to 14~~ claim 12,
characterized in that
the swelling agent used comprises at least one compound suitable as a swelling agent
for the appropriate surface and selected from the group of the alcohols, the glycols, the ethers,
the glycol ethers, the ketones, the esters, the amides, the nitro compounds, the halogenated
hydrocarbons, and the aliphatic and aromatic hydrocarbons, or a mixture of these.

Claim 16 (Original): The process as claimed in claim 15,
characterized in that

the swelling agent used comprises at least one compound suitable as a swelling agent for the appropriate surface and selected from methanol, ethanol, propanol, butanol, octanol, cyclohexanol, phenol, cresol, ethylene glycol, diethylene glycol, diethyl ether, dibutyl ether, anisole, dioxane, dioxolane, tetrahydrofuran, monoethylene glycol ether, diethylene glycol ether, triethylene glycol ether, polyethylene glycol ether, acetone, butanone, cyclohexanone, ethyl acetate, butyl acetate, isoamyl acetate, ethylhexyl acetate, glycol ester, dimethylformamide, pyridine, N-methylpyrrolidone, N-methylcaprolactone, acetonitrile, carbon disulfide, dimethyl sulfoxide, sulfolane, nitrobenzene, dichloromethane, chloroform, carbon tetrachloride, trichloroethene, tetrachloroethene, 1,2-dichloroethane, and chlorophenol, or comprises (hydro)chlorofluorocarbons, petroleum spirits, petroleum ether, cyclohexane, methylcyclohexane, decalin, tetralin, terpenes, hexafluoroisopropanol, benzene, toluene, and xylene, or a mixture of these.

Claim 17 (Currently Amended): The process as claimed in ~~at least one of claims 12 to 16~~ claim 12,

characterized in that

the swelling agent which comprises the particles has a temperature of from -30°C to 150°C, preferably from 15 to 100°C, prior to application to the surface.

Claim 18 (Currently Amended): The process as claimed in ~~at least one of claims 12 to 17~~ claim 12,

characterized in that

the swelling agent comprises particles which have an average particle diameter of from 0.02 to 100 μm .

Claim 19 (Original): The process as claimed in claim 18,
characterized in that
the swelling agent comprises particles which have an average particle diameter of
from 0.1 to 30 μm .

Claim 20 (Currently Amended): The process as claimed in ~~at least one of claims 12~~
~~to 19~~ claim 12,
characterized in that
the swelling agent comprises particles selected from silicates, minerals, metal oxides,
metal powders, silicas, pigments, or polymers.

Claim 21 (Currently Amended): The process as claimed in ~~at least one of claims 12~~
~~to 20~~ claim 12,
characterized in that
the particles have hydrophobic properties by virtue of treatment with a suitable
compound.

Claim 22 (Original): The process as claimed in claim 21,
characterized in that
the particles are provided with hydrophobic properties prior to or after bonding to the
surface.

Claim 23 (Currently Amended): A vessel with a synthetic polymer surface which has
self-cleaning properties and has surface structures with elevations, the production process
being as claimed in ~~any of claims 12 to 22~~ claim 12.

Claim 24 (Currently Amended): A textile with a synthetic polymer surface which has self-cleaning properties and has surface structures with elevations, the production process being as claimed in ~~any of claims 12 to 22~~ claim 12.